



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

the vibration is maintained. It also plays under water!

I have written out the theory, which under a certain assumption, shows that the sound can not be simple harmonic, though periodic. Pursuing the subject farther, I find that the problem leads to an integro-differential equation of a new type, and non-linear. Being in Paris in the summer of 1919 I wrote it out in French, hoping to present it to the Académie des Sciences, but took the précaution to show it to M. Hadamard. When he saw it he threw up his hands and exclaimed, "Vous avez résolu cela?" I replied, "Non, mais je l'ai posé," bearing in mind one of his papers where he had said that a problem was half solved when it was "bien posé." I thought I deserved some credit for that. So there it rests, half (or less) solved. If any of your readers think they can solve it, I am willing to divide the profits, or κῶδος, with them.

I am also indebted to Professor Barus for the word "siffling," which I had thought a Gallicism, but find that it is used by Chaucer.

ARTHUR GORDON WEBSTER

CLARK UNIVERSITY,

#### VARIATION IN TARAXACUM

TO THE EDITOR OF SCIENCE: Since several species of *Taraxacum* are parthenogenetic and at the same time highly variable they have looked like tempting material for the study of certain phases of genetics. Moreover their "polymorphy," as well as that of other parthenogenetic plants, has served as a partial basis for well-known attempts to explain parthenogenesis as due to hybridization.

As a matter of fact the degree of leaf dissection is correlated with the age of a given rosette. The typical seedling leaf in both of our common species (*T. vulgare*, gray-fruited, and *T. lævigatum*, red-fruited) tends to be entire and smooth, with the plant producing more dissected, and often more hairy, leaves as it grows older. This would have been obvious to students of the genus but for the confusing fact that smooth, entire leaves are often found on very old roots. If such cases are examined, however, it will be found that the apparently

juvenile leaves are borne on multicapital branches of tender age. •

It is of course well known that the vigorous production of blossoms after the second year causes a radial splitting of the root crown in seedling plants and the production of several daughter rosettes upon the parent root. This cleavage may extend through the length of the root and produce a number of distinct individuals, but in any case the daughter rosettes repeat the history of the parent seedling rosette, so far as leaf characteristics and blooming habits are concerned. If the newly split crown has been buried, the daughter rosettes will be produced at the end of typical rhizomes, often as much as six inches in length. Subsequent pressure renders these rhizomes quite root-like.

The above considerations clarify the interesting results of a culture experiment reported by Stork<sup>1</sup>. It is, moreover, not unprofitable from the standpoint of taxonomy to inspect the average herbarium collection of *Taraxaca* while bearing in mind the correlations just pointed out.

PAUL B. SEARS

UNIVERSITY OF NEBRASKA

#### SCIENTIFIC BOOKS

*Pharmaceutical Botany, A Text-book for Students of Pharmacy and Science.* Third Edition. By HEBER W. YOUNGKEN, A.M., M.S., Ph.M., Ph.D., Professor of Botany and Pharmacognosy, Philadelphia College of Pharmacy. P. Blakiston's Son & Co., Philadelphia. 1921. Pp. xix + 479. 238 illustrations and glossary.

This third edition of Dr. Youngken's excellent text-book has all the satisfactory points of the two preceding editions together with an enhanced value to teachers of the subject on account of the extensive improvements made in it. By reason of its adoption as a text in many academic institutions in addition to its very general use in the pharmacy schools, the author has followed the tendency already expressed in the second edition of making it more suitable for general botanical

<sup>1</sup> *Bull. Torr. Bot. Club*, 47: 199-210, 1920.